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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/660,362

09/12/2000

Kazuko Iwatsuki

H-942

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7590

05/19/2005

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ALEXANDRIA, VA 22314

EXAMINER

CHANG, RICHARD

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,362

Applicant(s)

IWATSUKI ET AL.

Examiner

Richard Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
4a) Of the above claim(s) 1, 4, 5, 9, 14, 22 and 23 is/are withdrawn from consideration.
5) ☒ Claim(s) 2, 3, 6-8, 10-13, 15-21 and 24-27 is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters: Specification is objected to because of the following informalities:

Regarding to Specification, as discussed in the interview with attorney Stanger, pages 27 and 37 of the Specification are incomplete and defected and must be replaced with the original pages without introducing new matters.

Claim 17 is objected to because of the following informalities: claim 17 depends on independent parent claim 19. But the dependent claim should be assigned with claim number higher than the independent parent claim for the claim tree's clarity.

Appropriate correction is required.

2. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

3. Claims 2-3,6-8,10-13,15-21 and 24-27 are allowed.

Examiner's Statement of Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

The prior art along or in combination fails to teach or make obvious the following limitations:

“a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and a transmitter connected to said at least one transmission medium for transmitting said control frame to said at least one transmission medium according to the instruction from said band controller; wherein said network apparatus controls the transmission band volume of a frame transmitted from said at least one other apparatus to within a preset band volume; and wherein said band controller periodically instructs said transmitter to transmit said control frame.” as recited in the independent claims 2, 6 and 15.

“wherein said transmitter is provided to correspond to said at least one other apparatus, and includes at least one port connected to said at least one transmission medium; wherein said transmitter transmits said control frame from said at least one port; wherein said preset band volume is set to correspond to the total of the frame transmission band volume transmitted from said at least one other apparatus; and wherein said band controller instructs said transmitter to transmit said control frame when the total of the frame transmission band volume transmitted from said at least

one other apparatus exceeds said preset band volume.” as recited in the independent claim 7, and

“wherein said preset band volume is set to correspond to each of some of said at least one other apparatus; and wherein said band controller instructs said transmitter to transmit said control frame to the port provided to correspond to said at least one other apparatus when the transmission band volume of a frame transmitted from said at least one other apparatus exceeds the band volume preset for said at least one other apparatus” as recited in the independent claim 8.

“a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and wherein said network apparatus includes at least one said band controller that corresponds to each of some of said at least one port.” as recited in the independent claim 10.

“a band controller for providing an instruction to transmit a control frame that temporarily suspends frame transmission from said at least one other apparatus; and wherein said network apparatus includes only one unit of said band controller” as recited in the independent claim 11.

9 “wherein said preset band volume is set to correspond to the total of the frame transmission band volume transmitted from said plurality of apparatus; and wherein said band controller instructs said transmitter

to transmit said control frame if the total of said frame transmission band volume exceeds said preset band volume” as recited in the independent claim 16.

“wherein said preset band volume is set for each of said plurality of transmission media in such a way as to correspond to the transmission band volume of a frame transmitted via each of said plurality of transmission media; and wherein if the transmission band volume of a frame transmitted via any one of said plurality of transmission media exceeds said preset band volume that corresponds to said any one transmission medium, said band controller instructs said transmitter to transmit said control frame from a port connected to said any one transmission medium” as recited in the independent claim 18.

“wherein said transmitter includes at least one link aggregation sub-layer and a plurality of MAC control units; wherein said at least one aggregation sub-layer receives an instruction from said band controller and distributes said instruction to each of said plurality of MAC control units; and wherein each of said plurality of MAC control units corresponds to each of said plurality of ports, and transmits said control frame from each of said plurality of ports 3according to the instruction from said band controller” as recited in the independent claim 19.

“wherein at the step of transmitting said control frame, said control frame is periodically transmitted by said at least one second apparatus; and

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wherein at said suspending step, frame transmission is periodically suspended according to said control frame that is periodically received” as recited in the independent claim 24, and “communication band volume possessed by said at least one transmission medium; and wherein at the step of transmitting said control frame, said control frame is transmitted when the transmission band volume of a frame transmitted from said at least one first apparatus exceeds said set band volume” as recited in the independent claim 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RKC

rkc

Richard Chang
Patent Examiner
Art Unit 2663

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER

5/16/05